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"NEC TENUI PENNÂ."

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Original.

TREATMENT OF FRACTURES OF THE ELBOW JOINT.*

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Because of the great utility of the elbow joint, and because of the unsightliness of deformity in this locality, perhaps more ingenuity has been expended in devising modes of treatment for fractures here than elsewhere in the body. But for the reason that fractures of the elbow are of frequent occurrence, and are often times treated by those unfamiliar alike with the gravity of these lesions and the technique of their proper surgical management, I venture upon the following remarks with the hope that they may be not altogether amiss, and possibly prove beneficial in a small degree. That which I shall say will embody personal experience, which, ill or good, subserves best the purpose of an interchange of knowledge.

The nature of fractures through joints is always that of a complicated injury, which varies in gravity with the size of the joint and the complexity of its office. It appears at once, then, that fractures through the elbow joint are of the most serious character, since this is one of the largest and the only complex one in the body. Immediately on the threshold of the situation we are met by questions of the most serious moment, which always more or less modify the issue and are active elements in the subsequent history. I refer to traumatic gravities; though in the elbow these are not a more common condition than in other articular fractures, but here they more readily compromise the result of treatment than in simpler joints. The reasons are patent to those who will contemplate the mechanism of the part, and my remarks would exceed your patience if interspersed with a detailed description which every hand-book of anatomy furnishes. The philosophy of early securing rest to a fracture any where, is based upon a desire to prevent pain and inflammatory complications. Joined to this is the paramount necessity of preventing further irritation to the delicately sensitive synovial membrane. But for these desiderata no other treatment need be undertaken until the time when repair begins has arrived. Without being scientifically familiar with all the reasons, the older writers advised abstinence from "permanent dressings" until the subsidence of acute swelling. They feared the results of undue pressure occasioned by swelling beneath the bandage. We know that repair proper does not begin until the superabundant effusion has been absorbed and comparative vascular equilibrium has been re-established, and endeavor to facilitate this by means to secure rest of the parts. We know too that in joint-fractures much depends on the prevention of disorganizing processes in the interior structure of the joint; but not only do these militate against proper repair and re-establishment of function, but against the very existence of the limb. Nothing furthers our purpose better than rest, and nothing secures this better than prompt fixation of the injured part; but just here comes in the chance of grievous error, which may best be illustrated by a supposititious case.

Given, a fracture through the internal condyle apparently involving the ulnar trochlear surface; great swelling and pain; inability on the part of the manipulator to determine by the necessarily baulked sense of touch whether apposition of the fragments can be secured before the dressing is applied. What shall be done? By all means keep the limb quiet; if you like, with a

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properly fitting box splint or plaster casing. Keep up this first treatment until the disappearance of the acute swelling, which will be in from five to six days, and then adjust the fragments. Nothing has been lost; certainty of apposition is secured. Do not wait longer, however, lest the ensheathing callus should form and prevent the possibility of "readjustment" without the exercise of undue violence. *Success here depends upon a certain selection of the opportune moment for changing the dressing.* At the end of the tenth day the ensheathing callus is nearly, if not quite perfectly formed, and the condition must be left undisturbed, unless, indeed, the degree of deformity should warrant the risk of re-inviting an acute exacerbation. It is such common practice to "put up" a fracture and "leave the parts undisturbed" for four or five weeks, and it is such a common experience to be astonished at the result (?) of such pious regard for rule (?), that I believe the teacher who succeeds in removing this bane of routinism, especially as it applies to the treatment of joint fracture, ought to be praised by the profession and laity alike. Billroth has lately contented himself with the simple application of adhesive plasters, put on in parallel strips in the long axis of the limb, in cases of fracture through the elbow joint, and is satisfied with the results; they are uniformly good. By this means the parts are sufficiently "fixed" to prevent undue motion, the changes of condition may be promptly and accurately noted, and the passive motion begun as early as is essential to securing perfect usefulness.

This great teacher permits the arm to hang by the side in order that the weight of the lower section may act as a counter-extending force. No fracture in the continuity of long bones, or communicating with their joined extremities, constitutes an exception as regards the influence of muscular contraction and its tendency to produce and maintain deformity. The more comminuted the fracture (simple), the greater will be the displacement of fragments by muscular contraction. Immediately succeeding violence sufficient to break a bone, the neighboring muscles are in a state of spasm, and this, though it may be temporarily overcome by anesthetics, does not finally succumb to any thing save due disappearance of active irritation brought about by proper rest and position; these conditions being by no means always secured by covering up the difficulty with a coating of plaster-of-Paris while the patient is anesthetized; for, how often does it happen that a broken limb is the site of acute pain after "the doctor" has put on a beautiful covering which really serves the opposite purpose from his intention! Such a condition is in every case an imperative indication for the removal of dressings. It means that the adjustment has not been accomplished, that muscles are contracting violently and forcing sharp, rough surfaces in contact with sensitive parts; it means that (if nothing else happens) kindly nature will, after a time, adapt herself even to bad surgery, that the pains will disappear (as the doctor promises), and the muscles maintain a permanently contracted state. Thus nature protects the injured joint from further violence, but at the same time marks the victim of fearfulness or ignorance with deformity and impaired or destroyed usefulness.

It happens rarely that a fracture of the elbow can be properly adjusted at the first visit of even the *expert* surgeon. When it is accomplished, the best evidence of the fact is entire absence of pain and but slight elevation of local temperature. If an opposite condition obtain, *i.e.* pain, heat, swelling, and general restlessness, it is frequently a fact that a smooth, nice looking dressing covers up a state of affairs which would be much improved by its prompt removal. For, surely, there is not a re-establishment of the normal relationship of parts. The deduction is plain. The dressing, whatever its character, must secure freedom from pain and concomitant conditions. Let it be simple, then, as possible, and manageable in some degree by the patient or nurse. Let it have in common with permanent apparatus only the characteristic of strength and stiffness. A tin or a leather gutter-splint answers the purpose best. If it be possible to adjust the fragments certainly, at the first examination, it is proper to do it; but, if the operation be coupled with doubt, nothing has been lost if the dressing be of the character described, and daily inspection of the injury be practiced and the earliest moment for a second effort at reduction be promptly utilized. Two or three hours will nearly always suffice for the formation of considerable swelling; enough to make it quite unsafe and to render manipulative efforts of doubtful merit. Under such circumstances it is best to defer an attempt at perfect apposition, and to make a guarded diagnosis as to the exact line of fracture. There are occasional instances presented by thin, delicate

subjects, in which these impediments are absent.

It is customary to adjust to fractured elbows a rectangular splint, because most of us have been led and allowed ourselves to believe that an injury of this sort means an almost invariable establishment of anchylosis, and hence it is sought to give the limb the most useful (?) position preparatory to the expected result of treatment. Without stopping to consider, just now, the propriety of the position (rectangular) given the limb, I wish to submit that the usual prognosis is unfair to both physician and patient; though I believe it to be based upon experience but not of such a character as better practice might have rendered it.

If the foregoing remarks be borne in mind, it will be admitted that, since a strong ensheathing callus is formed by the tenth day of the existence of the injury, passive motion may be now safely begun. It need not, *must* not be violent or extensive, but merely sufficient at first to satisfy oneself that there *is* motion. Every third day after the tenth, somewhat increased effort at passive motion should be made, and at the same time the patient should be encouraged to make voluntary attempts. In my experience these measures have resulted in my being able to finally dismiss my patients when the fracture had united (?) at the end of the sixth week, with good motion and with the way paved for its perfect re-establishment. I do not believe such an experience to be phenomenal, but unusual with those unduly timid in the management of their cases. It is quite possible to overdo such practice as is here counseled, and thus favor the appearance of "delayed union." Nice discrimination may protect us from this mishap. But even when it occurs it is as much due to constitutional defects as to the method of treatment. Care should be taken to discover the presence of constitutional disease, or cachexia, and, in the event of its discovery, efforts at motion may be advantageously delayed and more cautiously practiced than ordinarily.

The contrast between cases treated as ordinarily and those treated by the method here advised is too great to be overlooked. Instead of the stiff wrist and fingers, incident to the long confinement which is a part of the ordinary mode of procedure—that of including these parts in the conventional fixed dressings — the patient never loses any part of their perfect mobility, as is evidenced by the case before you. With due regard to consistent rules for maintaining perfect quiet during the formative stage of the ensheathing callus, both the hand and the wrist may be set free after the tenth day in the history of the case; and thus the time usually devoted to efforts at re-establishment of function in these parts (fourteen to twenty days) may be saved to the patient, no small matter to a laboring man. After the tenth day, then, it is neither necessary or expedient to permit the casing of the limb to cover more of it than from the wrist joint to the insertion of the pectoralis major in the humerus. This is best made of leather, molded to the arm and supplied with lacings. It is not even necessary to keep this apparatus on at all times, except in case of small children or refractory persons; but its use may be limited to the night, when the unconscious movements of the body may occasion mischief. It matters little what be the degree of angularity, more than 90°, is given to the arm as it lies in the leather sheath. But it has seemed expedient to me to place it at about 135°, this being about the most comfortable position of the limb during sleep or consciousness. I do not anticipate anchylosis in my cases of "simple fracture" of the elbow, and therefore, and for still another reason, do not "put them up" at the classical prescribed angle. If by some rare accident (suppurative disease) a simple fracture should result in anchylosis, it can easily be demonstrated that the angle of 135° is preferable to 90°, except under somewhat extraordinary circumstances, as, for instance, the subject's having but one arm; in that event the angle of 90° is best, so that the person may feed himself. In compound fracture or excision of the elbow the conditions are all of a character which render it practical to anticipate anchylosis; if such be the result, the limb is more useful when stiffened at 130°–135°. Especially is this the case in the laboring class. The hammer, shovel, or trowel, or nearly every other implement of industry may be more advantageously handled with the arm in this position, whereas the rectangular poise is only adapted to eating, the head-toilet, and writing. Under proper circumstances calling for a choice between these two positions of fixation, the greatest need of the particular case should govern. It is a most important matter, and deserves the careful attention of any practitioner who may be called upon to treat fractures involving the elbow joint.

LOUISVILLE.

Miscellany.

THE SENSES IN NEW-BORN INFANTS.—The following is a summary of the inaugural dissertation of Genzmer on the above subject. (Birmingham Medical Review.) He says that the sense of touch is developed from the earliest period, and reflex actions are readily excited by the slighest stimulation of the nerves of touch, especially of the face, then of the hands and soles of the feet. The feeling of pain is but slowly developed, and is only clearly exhibited after four or five weeks, before which time infants do not shed tears. True muscular sense is at least doubtful. Excitement of the sense of touch gives rise to unconscious reflex movements; the amount, therefore, rather than the quality of the sensation is observable. Closure of the nostrils occasions a reflex dyspnea. Hunger and thirst are manifested in an increased general irritability followed by reflex movements; these cease after the first week. Smell and taste are not distinguishable to infants. Genzmer asserts, in opposition to Kussmaul, that the sense of hearing is perceptible in the first, or at most the second, day of life. New-born infants are so sensitive to light that they will turn the head to follow a mild light; while if strong glare be suddenly thrown upon the eye, squinting is induced, and even convulsive closure of the lids. After a few days the child will follow the motion of various objects by movements of its head. Between the fourth and fifth weeks the convergence of the pupils and the power of co-ordination in vision are perceptible. A distinct perception of color does not exist under four or five months; before then it is quantity rather than quality of light that is recognized. The inhibitory reflex center is not yet developed in the eye; weak and moderately strong irritation excite movements which subserve that purpose. Excessively strong impressions only excite passive movements. New-born infants can not separate the impressions on their organs of sense. The readiness of excitability is shown in the fact that the stronger the stimulation the shorter the physiological interval.

A FEW WORDS TO SUBSCRIBERS.—We commend this, from the Pacific Medical and Surgical Journal, to our delinquents: Bills have been sent recently to most of our subscribers. Quite a number have responded at sight. We return them our sincere thanks and we have an abundant stock of gratitude on hand for others to draw upon in like manner. Some names stand on our list coupled with a considerable amount of arrearages. It is probable that most of these have allowed their accounts to run on from year to year through sheer oversight. Where there is a reasonable excuse we make no complaint. But we do expect to hear from those who can pay and who have no good reason for not paying. It adds a grievous burden to the toil and worry of an editor when the pittance of less than "a penny a day" is withheld from him. The burden is financial in part only. Neglect and indifference weigh heavier than mere pecuniary considerations.

MALARIAL DISEASES are reported by the secretary of the Connecticut Board of Health as unusually prevalent in places like Manchester, where they have more recently appeared, while in the places where they first appeared but little prevalence is noted, and the deaths from typhoid fever exceed those from all forms of malarial fever. (Boston Medical and Surgical Journal.) Still, even in these places, there has been quite a number of cases of acute intermittent fever, which has not been noticeable before for several years. Upon the whole, however, the malarial influence appears to be waning very decidedly and its effect upon other types of disease less marked. The sale of quinine at the drug stores has rather decreased in comparison with that of former years. The progress into new territory is slow; but few towns report cases. Hampton, in Windham County, reports a few cases. This is one of the hill-towns with little swampy land comparatively. Several cases are reported from Watertown, Naugatuck, Monroe, Haddam, Suffield, Windham, and Westport, but in general malarial diseases occupy a much less prominent place, while typhoid fever is increasing in frequency.

WILLIAM BATES, B. A. (Birmingham Medical Review) says of Harvey, that, like the "Virtuoso" of Akenside,

> "He many a creature did anatomize,
> Almost unpeopling water, air, and land;
> Beasts, fishes, birds, snails, caterpillars, flies,
> Were laid full low by his relentless hand,
> That oft with gory crimson was distain'd;
> He many a dog destroy'd and many a cat;
> Of fleas his bed, of frogs the marshes drain'd;
> Could tellen if a mite were lean or fat,
> And read a lecture o'er the entrails of a gnat."

DR. ABERNETHY AND THE LATE GENERAL DIX.—In the biography of the late General Dix, written by his son, Morgan Dix, which has just appeared, is an account of an interview with the celebrated Dr. Abernethy. It will interest our readers especially, since it is known that the wisdom of the physician's advice carried General Dix from dyspeptic youth into eighty years of robust life. General Dix gives the account himself: "He received me with great civility, heard a few words of the story, and cut me short as follows: 'Sir, you are pretty far gone, and the wonder is you are not gone entirely. If you had consulted common sense instead of the medical faculty you could probably have been well years ago. I can say nothing to you excepting this: You must take regular exercise, as much as you can bear without fatigue, as little medicine as possible, of the simplest kind, and this only when absolutely necessary, and a moderate quantity of plain food, of the quality which you find by experience best to agree with you. No man, not even a physician, can prescribe diet for another. 'A stomach is a stomach;' and it is impossible for any one to reason with safety from his own to that of any other person. There are a few general rules which any man of common sense may learn in a week—such as this: That rich food, high seasoning, etc., are injurious. I can say no more to you, sir; you must go and cure yourself.'"

ON ANESTHETICS IN OPERATIONS ON THE TONGUE.—A writer in Practitioner says, in administering anesthetics in excisions of the tongue it seems all-important that the anesthesia should *not* be profound. He holds that partial insensibility only is admissible, and has seen more than one fatal case during removal of the tongue, the patient being profoundly insensible. He believes that if there be much or little bleeding, mop as much as you may, some blood trickles backward, and little pools accumulate in the glosso-epiglottidean pouches, and flow over into the larynx, and the epiglottis, being held erect by the drawing forward of the tongue, can not divert its course. On the other hand, the patient coughs up the blood if only *partially* under the anesthetic.—*Boston Med. and Surg. Jour.*

[In such cases anesthetics which are slow in action, like ether, should never be used. Chloroform which acts more promptly will submit the patient to less risk from strangulation.]

A DRUGGIST'S ERROR.—A physician of Paterson prescribed some quinine for a patient the other day, and the druggist made up the powders by weighing them. (The Weekly Medical Review.) In a fit of absent-mindedness he rolled up in a paper the little weights of the scales, and gave them to the messenger. The next day the doctor called to see his patient, a German woman, and asked how she was getting along. "I vos got along bretty goot," she replied, "aber I ton't know how much to take py dot funny meticines. Dose bills pe two dree sizes, und I can'd know py meselluf vich I shall take furst. I took dree or four leedle vons furst." The doctor asked to have the medicine shown to him, and was astonished to see the apothecary's weights. "Are these what you took?" he asked. "O, yah! Did n't I dolt you I dook dree or four? Und dem make me veel a crate deal besser already." The woman had actually swallowed the four smallest weights, and so strong was her imagination that she recovered health at once, and soon was at her work again.

TREATMENT OF IODISM.—The unpleasant effects of the iodide appear earlier and continue longer in those in whom the processes of elimination are deficient or slow. If large draughts of water are taken with iodide, in many cases iodism may be prevented, the water aiding in elimination. Bumstead states that if Fowler's solution is administered with the iodide, the eruption of acne may be prevented. Some claim that, if a full dose of carbonate or spirits of ammonia be administered with the iodide, the unpleasant effects of iodism may be obviated; but Ringer states that he has many times tried this, with no decided effects. If, on continuing the drug, the state of tolerance is not established, and if, after exhibiting it highly diluted, or with ammonia, the bad symptoms still continue, by stopping the drug for a few days they will all disappear without any other treatment.—*G. T. Jackson, M. D., in Southern Medical Record.*

DR. SQUIBB has substituted for the ordinary blue and red litmus paper a single color, namely, purple. This purple litmus paper turns red with acids, blue with alkalies. It is claimed to be much more delicate and convenient.

TWENTY thousand ounces of fine gold are annually used in filling teeth.

ANIMAL INTELLIGENCE. — Adopting the terse language of Shylock, we may ask, Hath a dog reason? And, falling into a more lengthy style, we may inquire, Is its reasoning at all comparable to that of the human being? (Lancet.) We think both these questions must be answered in the affirmative. Those who differ from us will certainly admit that the possession by man of a language of symbols must have an enormous influence in increasing the power of his intellectual faculties. So much, indeed, must this be the case that what is really only a difference of degree is yet so stupendous that an intellect, the product of the employment for ages of word signs, might be thought to be an altogether new and original faculty. We are inclined to assert, however, that almost the sole essential difference between the intellect of the dog and that of the man may be traced to the above cause. A dog can reason, but not by using symbols. It employs the mental picture of an object, the olfactory perception of an agent, the auditory impression of a sounding body for the terms of its premises. But clumsy as those may seem, yet the mind of the animal successfully grapples with them. The dog argues from the ideas of concrete things, although incapable of abstraction and of the formation of a conception. Devoid of generalizations, it deals with particulars: but it does reason; it substitutes one idea for another; it weighs and estimates at their true value the successive mental images which present themselves to itself. Every one knows the tenacious memory of the dog, not only for what it has seen, but for what it has smelt and heard. The olfactory sense in many species is truly marvelous, and its mental grasp or memory of the same is remarkable in an equal degree. No division can scientifically be drawn between the memory of a landscape by a dog and the recollection of a region by a man. Moreover, the dog is not simply a mechanism, the result of hereditary action. The indiuidval can learn new things— nay, even execute complex mental feats for itself. The following instance, which forcibly illustrates the power of the reasoning of the dog, came under our personal notice. A gentleman last season bought a middle-aged blue pointer, which, with his good qualities as a "wide ranger" and "staunch pointer," combined the faculty of retrieving partridges. When the snipe season commenced in October, the dog took no notice whatever of the "long bills," but looked upon them as vermin and drove them away. After being out about six times snipe-shooting, finding that his master shot these birds, the dog stood at each snipe, and, when killed, dropped it at the sportsman's feet. The instance is certainly remarkable. Such a faculty of ready apprehension and creditable performance of a difficult mental task (for it must be remembered that he had his hereditary influences to overcome) would have been hailed with delight had it been manifested by a child who had not the knowledge of spoken language.

GLIMPSES OF SEVENTEENTH CENTURY MEDICINE AND MEDICAL MEN. — E. T. Blackwell, M.D. (Med. and Surg. Reporter): The cause of pain is thus set forth, "We take it that *a Chill Pain*, troublesom with grievous Coldness, takes its original from the *Juice of the Pancreas very acid and sharp, raising an effervescency with Choler less fat or little*, and also *overwhelm'd with Phlegmatic Humors*, as we observe that Spirit of Vitriol mixt with any *Volatil Salt*, but not oily, raises an effervescency, coupled with a notable chilness and coldness, only sensible." "*A Boaring and Fixt Pain may be Cur'd, by correcting and tempering both the Acid Acrimonie of the Juice of the Pancreas*, and also the *viscousness of Phlegm* accompanying; which is chiefly performed by *Aromatic Gums, Galbanum, Sagapen, Bdellium, Ammoniac, Apoponax, Mastich, Myrrh*, etc., as also by any *volatil salt*, and chiefly *oily*."

SUING FOR A DIPLOMA.—We see it stated that a rejected candidate has applied to the courts for a mandamus to compel the faculty of the Maryland Medical College to give him a diploma, alleging that his rejection had damaged him to the amount of $2,000. Such cases are rare. We have had one in California nearly resembling it, the rejected candidate confining himself however to threats. In this case the deficiency of the candidate was so marked that he failed to receive a solitary vote in the faculty; and yet he regards himself as fully competent.—*Pacific Med. and Surg. Jour.*

VACCINATING LIVE STOCK.—M. Pasteur tells the Academy of Sciences of Paris that wonderful results are being obtained in the work of vaccinating live stock as a preventive of disease. During the last year eighteen thousand sheep, four thousand head of cattle and five hundred horses have been

vaccinated. Before this system was introduced the annual loss from liver-rot in one department was nine per cent, while the loss since then has been reduced over one half. Among flocks partially vaccinated even the loss is one to ten between the vaccinated and unvaccinated. The experiment was fairly tried, the cattle receiving in care and food the same treatment. Among the four thousand five hundred and sixty-two head of cattle vaccinated during the year there were but eleven deaths, the rate of mortality being reduced from 7.03 per cent to .24 per cent.—*Jour. Health.*

PREPARING FOR THE CHOLERA.—The negro's fondness for "doing something" is thus illustrated by the Detroit Free Press: A middle-aged negro, who seemed to be laboring under considerable excitement, halted a policeman yesterday and asked: "Say, boss, what 'bout dat 'Gypsum cholera de papers am a makin' sich a fuss ober?" "Why, they have the cholera over there," was the reply. "An' she's gwine ter spread to dis kentry?" "It may." "An' dey say it's powerful hard on the cull'd populashum. Man up Woodard Avnue tole dat hit jumped right ober white folks to git at a black 'n." "I believe that's so." "Well, Ize gittin ready fur it. Ize carryin an ingion in each britches pocket. Woman on de market told me dat was a sho' stan-off." "I should n't wonder." "An Ize drinkin' a cup full o' vinegar wid kyann pepper sprinkled in. Hardwar man tole me dat was a boss thing." "Yes." "An Ize soakin' my feets in sour milk free nights in a week, an' rubbin' de spine of my back wid kerosine ile. Butcher up Michigan Avnue tole me dat was a sartin preventer." "I should think it was." "An' got tarred paper an' cut out soles to war in my butes. One of de Al'erman tole me dat de cholera allus strikes de feet fust thing. I reckon it won't git frew dat tarred paper. An' Ize been chewin' a gum made of beeswax an' taller, wid a leetle camphor-gum rolled in. An' Ize bin bled twice in de last month, an' had a tooth pulled, an' my ha'r cut, an' my photograph taken, an' I reckon if de cholera comes friskin' around Detroit I need n't be uneasy."

INTOXICATING LIQUOR DRINKING.—The report of the Commissioners of Inland Revenue shows that, during the year ending March 31 last, the revenue from excise duties upon spirits decreased £62,296, and upon beer £130,451. (Medical Times and Gazette.) The quantity of spirits consumed as a beverage decreased in England by 294,270 gallons, and in Scotland by 46,254 gallons, but in *Ireland there was an increase of* 245,667 *gallons;* thus the net decrease for the United Kingdom was 94,857 gallons. The commissioners remark on the decrease in the consumption in England and Wales, that it appears comparatively small, "but it becomes more significant of altered habits when considered in connection with the *natural increase which must have taken place in the population.* There can not be any doubt that in some localities the spread of temperance principles has already caused a marked diminution in the consumption of intoxicating liquors, and the tendency is still increasing. On the other hand, it is remarkable to find in Ireland, in spite of an estimated *decrease of population,* an increased consumption of 245,667 gallons.

CENTENARIANS.—These centenarians lived and died in the parish of Ilfracombe; their remains are deposited in the churchyard: John Pile, died May 17, 1784, aged one hundred years; Sarah Williams, died January 13, 1788, aged one hundred and seven years; William Soaper, died November 6, 1804, aged one hundred and three years; John Davies, died March 4, 1810, aged one hundred and two years. Elizabeth Brooks, died January 10, 1840, aged one hundred years; Nanny Vaggs (widow), born June 19, 1758, died October 6, 1859; Jane Richards, died June 13, 1875, aged one hundred and one years.—*Medical Times and Gazette.*

ECZEMA OF THE SCALP IN INFANTS.—Dr. Lassar (Gaz. Méd.) employs the following formula: Salicylic acid one, tincture of benzoin two, and vaseline fifty parts. A certain quantity of this is smeared over the scalp two or three times a day, after having washed the infant's head with soap and water. To soften the crusts and facilitate the cleansing of the scalp, Dr. Lassar recommends the employment of oil containing two per cent of salicylic acid.

FLATULENT DYSPEPSIA.—The sulpho-carbolate of sodium, in thirty-grain doses given after meals, is recommended in flatulent dyspepsia. Also in ten-grain doses for nausea and vomiting, particularly in pregnancy.

FEMALE PHYSICIANS, UNITED STATES.—According to a statistical return there are no less than 2,432 female physicians.

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LUNSFORD P. YANDELL, M.D., - - }
H. A. COTTELL, M.D., - - - - - - } Editors.

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FIBRIN FERMENT IN THE TREATMENT OF ANEURISM.

Our time has been fitly called the era of physiological medicine, and the physiologist, while complacently witnessing the wide influence and beneficent results of his favorite branch of science as applied to the treatment of disease, must note with no little satisfaction the gradual acceptance of his teachings by the surgeon, and the uses likely to be made of them in the practice of this most demonstrative branch of the healing art.

In the practice of physic so many of the lesions treated are out of sight, and so much of the science of therapy occult, that there will always be room for doubt with the many, and skepticism with the few, as to the appropriateness of the principles applied or the real significance of the results obtained.

In surgery, however, the conditions are reversed; here every procedure is based on scientific principles, and well nigh every operation performed in the full light of day. When, therefore, the results of physiological discovery are put to trial in surgery, a full demonstration of their worth or worthlessness may be confidently expected.

In view of these facts, a report of a case of femoral aneurism treated by the injection of fibrin ferment, in the British Medical Journal of August 18th, by B. F. Southam, M.B., F.R.C.S., is of peculiar interest, since it foreshadows, through recent physiological discovery, the substitution of a simple and safe means of treating aneurism for the long and painful method of pressure or the often perilous application of the ligature.

Mr. Southam's patient, a strong, healthy-looking man, thirty-eight years of age, came to the Manchester Infirmary on November 2, 1882, with a pulsatile swelling, about the size of an orange, in the upper part of his right thigh. Aneurism of the superficial femoral being readily made out, the patient was confined to bed for a fortnight, during which time intermittent pressure was kept up by means of tourniquets, but without apparent benefit. At this time the surgeon, acting upon a suggestion made not long ago by Dr. Arthur Gamgee, determined to try the effect of an injection of a solution of fibrin ferment into the aneurismal sac.

The patient was accordingly anesthetized, and the flow of blood through the tumor completely arrested by digital pressure on the vessel above and Esmarch's elastic tourniquet below the site of the aneurism. A solution of fibrin ferment to the amount of one dram was then injected into the sac and the pressure maintained for thirty minutes, at the end of which time it was gradually taken off the vessel above and below, and the blood was allowed to slowly re-enter the limb. At this juncture the aneurism itself seemed unchanged, but pulsation had entirely disappeared in the popliteal and both tibial arteries of the limb. The following morning the condition was exactly the same, but toward evening (thirty hours after the operation) pulsation had returned, and could be distinctly felt in all the larger arteries below the aneurism. The writer has no doubt that the effect of the injection was to cause partial coagulation of the blood in the tumor, but that the clot was not sufficiently firm to resist the blood current, by which it was

washed out and carried to the distal portion of the vessel, where it was afterward broken up and dissipated through the circulation.

The sac in this case subsequently ruptured, the aneurism became diffused, and, finally, the external iliac had to be ligated for its relief; but nevertheless the results of the fibrin ferment injection were sufficiently encouraging to warrant for it further trial.

Mr. Southam suggests that in a similar case it would be well to inject a larger quantity of the ferment, and to keep the flow of blood arrested by pressure for a longer time, in order that a coagulum may form of sufficient density to resist the force of the blood stream on the re-establishment of the circulation through the limb.

Bibliography.

A Text-book of General Pathological Anatomy and Pathogenesis. By ERNST ZIEGLER, Professor of Pathological Anatomy in the University of Tübingen. Translated and edited for English students by DONALD MACALISTER, M.A., M.B., Member of the Royal College of Physicians, etc. New York: William Wood & Co. (July number of Wood's Library of Standard Medical Authors.)

Pathological anatomy is here treated in seven sections; section I being devoted to Malformations, section II to Anomalies in the Distribution of the Blood and of the Lymph, section III to Retrogressive Disturbances of Nutrition, section IV to Progressive or Formative Disturbances of Nutrition, section V to Inflammation and Inflammatory Growths, section VI to Tumors, and section VII to Parasites.

Each of these sections is worked out methodically and with commendable condensation of text, and constitutes a treatise, upon the subject with which it deals, sufficiently full to meet the needs of the general practitioner, who may not have time for the perusal of more exhaustive works. Much of the book necessarily discusses topics which have been previously well handled by various writers, and, aside from the opinions of the author and his peculiar manner of description, presents little of novelty. This, of course, is true of every work devoted to the unfolding of any great branch of medicine, but the reader will find a conspicuous exception to this rule in the section devoted to parasites. Here many important recent discoveries, not previously embodied in any systematic treatise, may be found, among which the researches and discoveries of Koch and Pasteur relative to specific bacteria, the studies of Klebs in syphilis and typhoid fever with reference to their parasitic nature, and the demonstration by Braun, of Dorpat, that the trout and pickerel of the Swiss lakes are the media of infection for the bothriocephalus in man, are noteworthy.

The work is freely illustrated by woodcuts, which do justice to nature in every thing but color. The editor has done his part with much skill, and, besides making the book accessible and useful to the English reader by an elegant translation of the text, he has added to the original many valuable paragraphs.

Pathological anatomy is at best a difficult science, in which but comparatively few physicians acquire proficiency, and any effort to render easy its investigation will not fail of due appreciation by the profession. The work under notice goes far in this direction, and will doubtless attain a wide popularity.

The Physician Himself, and What He should add to his Scientific Acquirements. By D. W. CATHELL, M.D., late Professor in the College of Physicians and Surgeons, of Baltimore. Third edition. Baltimore: Cushings & Bailey. 1883.

This deservedly popular book has already had several notices at our hands. No work in this generation has been received with more general favor by the profession of this country, and if the secret of its success be asked for, the answer is not far to seek, since it deals with human nature, is replete with common sense, and written with the one object of helping the doctor to a mastery of those extra-scientific problems upon which so much of his professional success depends.

We are confident that no physician, be he young or old, can fail to profit by the perusal of this delightful book, and, predicting for the third edition a rapidly exhaustive sale, we shall look for a fourth in the near future. So long as the struggle for professional existence continues in this jarring and jostling world of ours, and human nature remains unchanged, such books as the Physician Himself will be held in high esteem.

MEDICAL SOCIETY OF THE STATE OF TENNESSEE. Transactions, 1883. Fifteenth Annual Meeting. Committee of publication: Deering J. Roberts, T. A. Atchison, C. S. Briggs, G. B. Thornton, and C. C. Fite (Secretary). Nashville, Tenn.: Printed at the "American" Steam Book and Job Rooms. 1883.

The society met in Nashville on April 10th. The Transactions give evidence of an interesting meeting, and much good work done. Though the number of papers read was small, there being only six besides the address of the president, they are instructive and entertaining, and bear favorable comparison with those reported in the transactions of other State societies. The Constitution and By-laws of the Society and a full reprint of the old Code of Ethics, adorn the pages of the latter part of the volume. The next meeting will be held in Chattanooga, Tenn., Tuesday, April 8, 1884.

PROBENUMMER. Monatshefte für Praktische Dermatologie Redigert von Dr. H. v. Hebra Wien, Dr. O. Lassar, Berlin, Dr. P. G. Unna, Hamburg. Band 2, No. 1. Januar, 1883. Verlag von Leopold Voss, in Hamburg, u. Leipzig. Der preis is halb-jährlich, 6 mark.

A periodical which can place such eminent names as the above on its editorial list needs no praise from us. The present number has thirty-two pages of instructive and interesting matter, prominent among which is an article on syphilitic re-infection, by Dr. von Hebra. We commend the journal to any of our subscribers who may read German.

SOME REMARKS ON NASO-AURAL CATARRH AND ITS RATIONAL TREATMENT. By John N. Mackenzie, M.D., late House Physician in Bellevue Hospital, N. Y., Surgeon to the Baltimore Eye, Ear, and Throat Charity Hospital. Reprinted from Transactions of the Medico-Chirurgical Faculty of the State of Maryland. 1883.

SEWER GAS, AND ITS ALLEGED CAUSATION OF TYPHOID FEVER. By George Hamilton, M.D. Extracted from the Transactions of the College of Physicians of Philadelphia. Third series. Vol. vi. 1883.

DIAGRAMS FOR RECORDING DISEASES OF THE EAR, for the use of Practitioners, Students, and Clinical Assistants. Cincinnati: A. E. Wilde & Co. 1883.

Correspondence.

PARIS LETTER.

At the suggestion of M. Pasteur, a scientific mission has proceeded to Egypt to study the nature of the cholera epidemic prevailing in that country. The mission is composed of Drs. Strauss, Thuillier, and Roux, M. Nocard, veterinary surgeon, and Dr. Mahé of the French navy, all tried men who were trained under M. Pasteur in the use of the microscope, and are considered quite competent to undertake such researches. To this list may be added the name of M. Jules Aronssohn, professor of organic chemistry, who was deputed by the Government to act independently of the above mission and to study the etiology of the disease, keeping in mind its chemico-physiological aspects, and the therapeutical indications that may be deduced therefrom.

A mission has started, also from Germany, under the direction of Professor Koch, of Berlin, and another from England, for the same destination and with the same end in view. All are to act independently of one another, and if the true nature of cholera is not discovered in this dire field, it will not be for lack of efficient explorers.

M. Pasteur has given his party written instructions for their own protection against infection, which have been published, and which, if carried out to the letter, will allow the members of the mission scarcely any time for their investigations, as every thing with which they come in contact and every thing they eat and drink, and even the vessels to be employed for the purpose should, prior to use, be submitted to a temperature ranging from 55° to 150° cent. A critic writing on the subject facetiously remarked that, in order to procure complete immunity against the disease, the members of the mission should, if M. Pasteur's microbian theory be correct, have to live in a Ramson's furnace.

Latest reports from Egypt describe the epidemic of cholera as being manifestly on the decline. The British troops have been affected by the epidemic in spite of their being constantly removed from one station to another and encamped in the open air, so as not to allow the malady to get a hold on the men, a practice adopted among the troops in India, and which up till now has been found to answer better than any other sanitary measure in vogue.

Professor Bonchardat, who believes in the

parasitic nature of cholera, has published a report giving the number of deaths from the disease during five epidemics in France, as follows:

In 1832,	18,302
1849,	19,184
1853–54,	7,626
1865–66,	5,751
1873,	854

This table is sufficiently eloquent and, as M. Bonchardat remarks, although the intensity of the disease was the same during the five epidemics, the progressive decrease in its lethality was evidently due to the advances in science and consequently to improved sanitary precautions.

Dr. Burq, whose name has become famous in connection with his researches on copper, in which metal he finds a general panacea in a great many affections, particularly those of a nervous character, looks upon the metal as a specific in cholera and typhoid fever, and indeed in almost all infectious or contagious maladies, in which cases he recommends its use internally and externally, attributing to it undoubted curative and prophylactic properties. Dr. Burq has been studying these properties for several years, and he is more than ever convinced of the efficacy of copper in the affections above named; and, notwithstanding the persistent opposition he has met with in official quarters and in the profession generally, his persevering courage is undaunted, and would perhaps be more worthy of a better cause. Every opportunity is availed of by him for bringing the virtues of copper to public notice. During the last epidemic of typhoid fever in Paris he rode his hobby before both the academies, and now that the country is threatened with cholera he thought it opportune to bring it to the front again. But he has found a powerful opponent in Dr. Bailly, who came all the way from Chambly in the department of Oise, and, at the last meeting of the Academy of Medicine, vehemently protested against the assertions of Dr. Burq. Dr. Bailly is physician to a large factory in which are employed upward of five hundred workmen in the manufacture of copper articles, and during the twelve years he has been in medical charge of the establishment he found that the men enjoyed no greater immunity than their families from prevailing epidemics.

At the last meeting of the Societé de Chirurgie Dr. Richelot, junior, read a report on a communication that was made to the society by Dr. Vieusse, of Oran (Algiers), entitled "*Contribution pour servir a l'histoire sur le paludisme.*" The work contains five cases of patients, the subjects of malarial poisoning, in whom wounds, whether surgical or accidental, brought on a return of intermittent fever even though some time had elapsed since the last attack, and which disappeared only after the administration of full doses of quinine. Among these cases there was one, however, of which Dr. Richelot had some doubts as to whether the disease should be called malarial poisoning, as the patient died during a severe attack of rigors thirty-six hours after a wound, and he thought that death might be attributable to some other cause. To this Professor Verneuil replied that the cause of death in the case referred to was most probably due to "paludisme" (malarial poisoning), as he did not know of any malady which proved so promptly fatal as an attack of pernicious ague, and added that neither pyemia, nor septicemia, nor even the shock after operations would prove fatal in so short a space of time. Moreover Professor Verneuil stated that the cases under notice were most interesting, as the influence of traumatism on malarial poisoning was not to be found in classical works, and suggested that the subject would be one of fruitful study to physicians and surgeons practicing in malarious countries, and that it would be only after a certain number of observations that the problem in question could be elucidated.

PARIS, FRANCE, August, 1883.

WASP STINGS.—A correspondent states another death (the second in less than a fortnight) has just occurred near Bishop's Stortford, the deceased, Mrs. H., sixty-three, while cleaning a window was stung by a wasp on the nape of her neck. She called for oil to rub the spot, when she exclaimed she was going, and fainted. A medical man was called, but she never recovered consciousness, expiring within twenty minutes after receiving the injury.—*Medical Times and Gazette.*

STREET NOISES.—The town council of Luton have (Medical Times and Gazette) passed a by-law to prohibit, under a fine of 40s., "shouting, singing, howling, or playing upon any drum, tambourine, trumpet, cornet, or other noisy instrument, whether in procession or otherwise."

Selections.

CASES OF PURPURA HEMORRHAGICA, WITH REMARKS ON THEIR PATHOGENESIS.—By William Russell, M.B., Edin. We excerpt the conclusion from the British Medical Journal:

There are few diseases, our knowledge of which seems to have advanced so little during the present century, as has been the the case with hemorrhagic purpura. Since its first description by Werlhof, little has been added to the elucidation of its clinical or anatomical features. Willan, in his work on Cutaneous Diseases (1808), left us a picture which is practically as perfect now as it was then. There we find the premonitory lassitude noted; that the eruption may be preceded by, among other symptoms, shivering and acute pain; that the course of the disease is attended by extreme debility and depression, with a weak and frequent pulse, and, further, that "febrile paroxysms, like those of a hectic or remittent fever, occur at intervals." Dr. G. Gairdner (1823) pointed out the febrile condition of a patient, both during the premonitory and the fully developed stages. Bauer (*Dissertatio Inauguralis Medica de Purpurâ Hemorrhagicâ*, 1828) says that fever is sometimes present, and is sometimes hectic and of remitting character. He also noticed swelling of the spleen, and that the liver was affected, and mentions that Havinga had seen the disease with swelling of the submaxillary glands, and Neuhaüser, with parotid swelling. Dr. B. W. Richardson (Medical Times and Gazette, November 1874) divides the disease into three forms: (1) Aqueous purpura, which seems to be hemophilia; (2) saline purpura, which includes scurvy; (3) vascular purpura, where a disease of the minute capillaries is assumed. Immermann (Ziemssen's Cyclopedia of the Practice of Medicine, vol xvii) says there is a "primary disease either of the blood or of the walls of the vessels, or of both together," and that it is "impossible to answer the question as to its pathogenesis," and that, "in the search after an explanation, we are driven either to assume the existence of imperceptible changes in the blood, *e.g.*, the importation of a deleterious miasmatic principle, or to recognize as the basis of the hemorrhagic diathesis a peculiar disease of the blood-vessels more or less independent of the condition of the blood. The febrile movements, he thinks, may be of a "resorptive nature," or the blood extravasated may act as an "inflammatory irritant," or it may be due to what he believes to have existence, namely, a "special anemic fever." Dr. Hilton Fagge (Guy's Hospital Reports, third series, vol. xxv, 1880-1), in a paper on the relation between this disease and sarcomatous growths, says: "Different views may be taken with regard to their relations. One is, that a minute development of sarcomatous tissue, with vessels made up of embryonic cells, occurs at each spot which becomes the seat of an effusion of blood; or, perhaps, that sarcomatous cells, or nuclei, or even leucocytes in an abnormal condition, become lodged in the capillary vessels here and there, and produce softening of their walls after the manner of emboli" (p. 16). "But another view is to regard the purpura, the spongy state of the gums, and the epistaxis, as the joint results of a profound cachexia or alteration of the blood, analogous to that which is present in pernicious anemia, in splenic leukemia, and, indeed, in scorbutus itself... In splenic leukemia, a morbid state of the gingival tissues has been described by Mosler; it was present in a case of that disease which occurred in this hospital in 1878" (p. 18). But while stating these two views, he appears to lean toward that of "sarcomatous infection." But, were this correct, we should expect each spot of hemorrhage to become the center of a sarcomatous growth, and this does not occur. Again, that the glandular swellings present in some cases should be regarded as sarcomatous, is open to grave objections, which shall appear hereafter. The other hypothesis, that the affection is due to a structural disease of the minute capillaries, may be set aside, as no satisfactory change has been demonstrated in them, although much attention has been paid to the subject, and as it is difficult to imagine the nature of a vascular change which would give rise to such a series of phenomena. We thus seek to fix on the blood itself as the site of the evil. The clinical outline of the disease is, premonitory depression, or a condition below par, perhaps chilliness; the appearance of spots, and the presence of pyrexia; hemorrhages and increasing pyrexia; and, what has not hitherto been noted, a diminution and destruction of blood-corpuscles out of all proportion to the amount of hemorrhage; a rapid course and a fatal termination. The pyrexia can not be explained on any of Immermann's assumptions, for, in two of the preceding cases, the pyrexia was present when there was nothing but a few spots to

require "resorption," or to act as an "inflammatory irritant," even if it were believed, at this time of day, that blood-clot, under the conditions which hold here, led to pyrexia; and the "anemic fever" theory is untenable, for there was pyrexia in one of the preceding cases, with the red corpuscles at 77 per cent, and, in another, with them at 48 per cent; and we know that this fall in the corpuscular richness of the blood is not, under ordinary anemic conditions, accompanied by pyrexia. And the pyrexia is not the cause of the anemia, for the latter is out of all proportion to what exists in other morbid conditions where as high a temperature-curve is attained. That the blood is the seat of the disease is, I believe, further shown by the glandular enlargements which occur. That such enlargement may take place from a general blood condition, I had the opportunity of observing, some time ago, in a woman who had recurring attacks of pyrexia accompanied by a general enlargement of glands, the glands regaining their normal size during the apyrexial periods; and, in the above cases, the extent to which the glands diminished after death was very striking. From a clinical consideration of this disease, it appears to my mind to present the characters of a specific fever due to a specific poison, or what Dr. Creighton calls an autonomous disease. On this assumption, I asked Mr. Watson Cheyne to examine what material I had preserved for micro-organisms; and I here wish to acknowledge his extreme kindness in devoting time and labor to this subject. The slides of blood which I had prepared, and on which I had proposed to depend, were so unsatisfactorily stained that Mr. Watson Cheyne could not give a definite report on them. I had, however, retained a piece of heart covered with the hemorrhages characteristic of this disease; this he examined, and I annex his report *verbatim*.

Mr. Watson Cheyne's Report.—Immediately beneath the exocardium are extensive hemorrhages raising up the exocardium, and separating the muscular bundles. Many of the capillaries at the deeper part of these hemorrhages are plugged with small bacilli, and here and there, among the effused blood, small colonies of these bacilli are found. There are also a few single bacilli lying among the blood corpuscles, but the typical mode of growth of these organisms is evidently in colonies. The capillaries are not merely blocked by the plugs, but their walls are distended, and, in some cases, ruptured, the bacilli thus escaping into the surrounding tissue. There are no evidences of inflammation around the masses, the tissue in the vicinity being apparently quite healthy; and the individual bacilli vary somewhat in length, but the average length is $\frac{1}{7790}$ of an inch, and their breadth is about $\frac{1}{20000}$ of an inch, some of them apparently containing spores; at least there are unstained, roundish bodies in the rods, as a rule two in each rod. They do not materially differ in relation to staining agents from the common forms of micro-organisms, such as bacillus anthracis, but they are best demonstrated by an alkaline solution of methylene blue. From the size of the colonies, and the distension of the walls of the capillaries, the bacilli have evidently been growing in the blood for some time. Further, from the number of capillaries blocked by these colonies, and from the position of the plugs around the margin of these hemorrhages, there can, I think, be no doubt that these plugs have been the cause of the hemorrhage, acting in the same manner as any other embolus. Should the condition be found in other cases of purpura hemorrhagica, it will establish the fact that the hemorrhages, at least in this disease, are due to these bacilli, whether the relation between the organism and the affection as a whole be a causal one or not. I may caution future observers that the close arrangement of the organisms in the colonies, and the presence of spores, might lead one, at first sight, to the conclusion that the organisms in question were micrococci, but careful examination, with good lenses and correct illumination, will soon show that the bodies are bacilli.

Should Mr. Cheyne's observations be verified by others in other cases, it will be one step onward in our knowledge of this disease; although the more difficult problems will remain to be investigated as to suitability and preparation of nidus, the sources of infection, and the paths by which the infection reaches the circulation.

COPPER AS AN ANTIDOTE TO CHOLERA.—At a recent meeting of the Académie des Sciences, M. Bouley drew attention to M. Burq's assertion that those persons whose organism is thoroughly submitted to the influence of copper are as inaccessible to the attacks of cholera as those vaccinated are to smallpox. (British Medical Journal.) The following methods, according to M. Burq, are all equally efficacious, the habit of wearing copper bracelets, or bands which encircle

the waist, or materials which have been steeped in copper solution, or the administration of black oxide of copper in the form of pill. At a recent meeting of the Academy of Medicine M. Bailly furnished personal evidence which invalidated M. Burq's statement concerning the therapeutic value of copper in treating cholera. M. Bailly practices at Chambly, very near manufactories where spoons and forks are made with a copper alloy known as *alfénide*. All hands employed exhibit symptoms of the influence of copper; nevertheless, the ravages made in 1866 by an epidemic of cholera are subversive of M. Burq's hypothesis. During an epidemic of typhoid fever, fifty-six people were attacked; of these, twenty-six were impregnated with copper. Four of the twenty-six died; no other deaths were recorded. M. Bailly mentioned a fatal case of "charbon," consequent on a fly-sting; also deaths from diphtheria. All the sufferers exhibited symptoms of copper-impregnation. Summer diarrhea, also choleraic diarrhea, attacks those among the workpeople who are thoroughly impregnated.

NITRITE OF SODIUM IN THE TREATMENT OF ANGINA PECTORIS.—Dr. Mathew Hay, in the Practitioner, has recently made careful clinical trials of this salt in well-marked cases of angina pectoris. In one case nitrite of amyl was inhaled from three minim capsules, six or seven times a day for about a week, with good results. The nitrite did not entirely dispel the pain, it merely dulled it, and was always accompanied by giddiness, which compelled the patient to remain quiet for a minute or two, and it was followed by a headache and disagreeable feeling, which lasted one or two hours.

℞ Sodii nitritis, ... ℥ss;
Aquæ, ... ad fl. ℥xli.
Solve. Sig. Dose, one to two teaspoonfuls.

After a week the patient reported that he took one dose in the morning; this enabled him to get up, dress, breakfast, and walk to his office without experiencing the slightest pain, and without requiring more of the nitrite until after dinner; then it was taken only when he felt the pain coming on, and if he took it promptly it caused complete cessation of the pain in from one to two minutes. Nitrite of amyl had never completely abolished the pain. The nitrite of sodium caused no perceptible throbbing in any part of the body, and certainly no headache; apart from the effect on the pain it seemed to have no more action than so much water. In addition to the morning and noon doses he took one before going home at night, and at bed-time, as well as during the night if the pain came on. After three weeks it was found that whenever the nitrite of sodium was omitted he was liable to attacks of pain. If he took no medicine in the morning he never failed to have an attack of pain when he began to dress himself, and another on his way to work.

It was found by comparison that the preventive action of the nitrite of sodium is exercised over a much longer period of time than that of nitrite of amyl, and that nitrite of sodium acts in two or three minutes, or more slowly than the nitrite of amyl.

Instead of the nitrite of sodium one or two teaspoonfuls of a one-per-cent solution of nitro-glycerine was tried; its action was found to be similar to, though better than the nitrite of amyl, but its effect did not continue as long as the nitrite of sodium.

Dr. Hay anticipates a wide and important application in various forms of disease of the simple and more safely administrable nitrites.

DANGER OF GLAZED EARTHENWARE VESSELS.—M. Pérusson, of Limoges, furnishes fresh evidence of the danger of using glazed earthenware vessels, as the glaze frequently contains lead oxide, which becomes soluble in the presence of acids. M. Pérusson cites the following instance. One hundred grams of fresh milk was left to ferment in a glazed receptacle, and twenty-two centigrams of lead sulphate was removed from it. When the glaze becomes rugged, the interstices are filled with metallic and fermenting substances; thus the danger is increased. Such utensils should either not be used, or else submitted to the influence of the direct contact of flame, or, in other words, singed. This is the only method of rendering them harmless.

THE DURATION OF PREGNANCY.—A. F. C., in the American Journal of Obstetrics, quotes and comments upon the opinions of J. Veit (*Zeitsch. f. Geb. u. Gyn.*), as follows: Two hundred and eighty days have been commonly accepted as the average duration of pregnancy, by which term is intended the interval between the last menstruation and the delivery of the fetus. It is desirable to be able to fix upon the day when pregnancy is established, and in order to do this it is necessary to know whether the fertilized egg is a product of the last menstrual period or

of the first period which is omitted. Many statistical tables are cited, giving the average duration of pregnancy observed in different countries, and by different men. As these tables vary by as many as thirty days above and below the commonly accepted two hundred and eighty days, they are not of much value. The author thinks that the explanation for the variable period of time which intervenes between the first day of the last menstruation and the birth of the fetus is to be found in the causes by which labor is established. Three questions naturally arise in studying the subject of the duration: (1) What is the relation of ovulation to menstruation, as to time? (2) How long will the spermatozoa retain vital activity? (3) Does ovulation occur only with menstruation? The last two questions are considered to have been answered in the statement that there can hardly be a doubt but that the spermatozoa will remain active from the end of one menstruation until the beginning of the next; likewise, that the labors of Bishoff have shown that ovulation usually follows menstruation. Before the establishment of the last observed menstruation, seminal fluid may be present in the genital canal, which will be the fertilizing element for the ovum which appears with menstruation. A second possible means of impregnation lies in the fact that the ovum may have been deposited upon the uterine mucous membrane at the time of menstruation, and have been fertilized after a subsequent coitus. A third possibility is that the ovum may appear before or at the beginning of menstruation, be fertilized at that time, whereupon menstruation will stop and decidua begin to form. Which of these three theories is the correct one the author is unable to say. The conclusion, on his part, is that we are not, at present, able to say whether impregnation occurs at the time of the last menstruation or at the time of the first one which is omitted. We therefore remain in the same uncertainty with which we started, and must continue to estimate the duration of pregnancy only approximately.

TREATMENT OF ECZEMA OF THE GENITALIA, PRURITUS, AND LEUCORRHEA.—In cases of eczema, in which glyceroles and unguents have failed, the following formnla has been successful:

Chlorate of potassium,	30 grains;
Wine of opium,	50 grains;
Pure water,	1 quart.

Applied to the parts by linen compresses covered with oiled silk. If there is much inflammation, precede this with warm hip-baths and cataplasms sprinkled with powdered carbonate of lime. In obstinate pruritus, associated with leucorrhea, a tablespoonful of a mixture of equal parts of tincture of iodine and iodide of potassium, in a quart of warm tar-water (tar-water holding the iodine in solution) used daily, night and morning, removes the pruritus and ameliorates the leucorrhea. In fetid leucorrhea two or three tablespoonfuls (in a quart of warm water, morning and evening, as an injection) of the following formula will be found useful:

Chlorate of potassium,	13 parts;
Wine of opium,	10 parts;
Tar-water,	300 parts.

Or,

White vinegar (or wine),	300 parts;
Tinct. eucalyptus,	45 parts;
Acid, salicylic,	1 part;
Salicylate of sodium,	20 parts.

One to five teaspoonfuls in a quart of warm water, as an injection, two or three times a day.—*Obstetric Gazette.*

STRANGULATED CONGENITAL HERNIA.—At the Société de Chirurgié M. Trélat communicated a case of congenital strangulated hernia operated on, and the patient died the following day from congestion of the lungs. It was the case of a man aged thirty, who was admitted into the hospital for strangulated hernia. (Medical Press.) Taxis, baths, and every other means were tried in vain, and M. Trélat determined to operate, although the symptoms were not of a nature to make the operation imperative. The result was as had been indicated. M. Berges remarked on the case, and said that pulmonary complications were very frequent in this accident, he considered that renewed attempts at taxis were dangerous, and in his opinion if, after the first trial, no success followed, the operation should be made without delay. M. Chámponniére was of the same opinion, and he attributed the fatal issue to the repeated attempts at reduction. M. Desprès followed in the same line. The patient should be placed in a bath for an hour, and if the taxis did not then succeed the operation is necessary at once.

REMARKS on cases of multiple synovitis following injuries to joints is reported by C. Mansell-Moullin, F.R.C.S., in the British Medical Journal.

THE FORMATION OF CALLUS IN DIABETICS. For some years Mr. Verneuil has had this matter in his mind, and, observing whenever opportunity offered, has been struck by the fact that fractures do not heal well in diabetics. From his observations, he formulates the following conclusions, in the *Gaz. Hebd.*, July 27, 1883:

1. The retardation and absence of consolidation found in the three cases seem to be due to diabetic dyscrasia.

2. This retardation and absence of consolidation necessarily imply a diminution or suppression of the reparative forces, and particularly of nutrition.

3. From these facts we may conclude that diabetes, when it embarrasses or stops the formation of callus, does so, at least indirectly, by impairing nutrition.

SCARLET FEVER is due to a micrococcus, and not a bacillus, says Dr. Fraser, of Edinburgh. It does not make much difference which parasite is the cause, says truly the Medical and Surgical Reporter, what we now cry out for is a parasiticide.

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes of Stations and Duties of Officers of the Medical Department, U. S. A., from September 15, 1883, to September 23, 1883.

Campbell, John, Lieutenant-Colonel and Surgeon, Medical Director Department of the South, granted leave of absence for fifteen days. (Par. 2, S.O. 94, Department of the South, September 13, 1883.) *Alexander, Chas. T.*, Major and Surgeon, on being relieved from duty at the U. S. Military Academy, October 1, 1883, to report in person to the Commanding General, Department of the Missouri, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Alexander, Chas. T.*, Major and Surgeon, granted leave of absence for four months, from October 1, 1883. (Par. 1, S.O. 213, A.G.O., September 17, 1883.) *Gibson, Joseph R.*, Major and Surgeon, relieved from duty in the Department of the East, October 1, 1883, and to report by letter to the Commanding General, Department of the South, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Horton. Samuel M.*, Major and Surgeon, relieved from duty in the Department of the Platte, October 1, 1883, and to report in person to the Commanding General, Department of the Missouri, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Meacham, Frank*, Major and Surgeon, relieved from duty in the Department of the East, October 1, 1883, and to report in person to the Commanding General, Department of the Platte, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Smith, Andrew K.*, Major and Surgeon, relieved from duty at Willet's Point, New York, October 1, 1883, and assigned to duty at U. S. Military Academy, West Point, New York. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Taylor, Morse K.*, Major and Surgeon, relieved from duty in the Department of the East, October 1, 1883, and to report in person to the Commanding General, Department of the Missouri, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Wolverton, William D.*, Major and Surgeon, relieved from duty in the Department of Dakota, October 1, 1883, and to report in person to the Commanding General, Department of the East, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Appel, Daniel M.*, Captain and Assistant Surgeon, relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the Commanding General, Department of the East, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Merrill, James C.*, Captain and Assistant Surgeon, relieved from duty in the Department of Dakota, October 1, 1883, and to report in person to the Commanding General, Department of the East, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Maus, Louis M.*, Captain and Assistant Surgeon, relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the Commanding General, Department of Dakota, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Munn, Curtis E.*, Captain and Assistant Surgeon, relieved from duty in the Department of the Missouri, October 1, 1883, and to report in person to the Commanding General, Department of the East, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Patzki, Julius H.*, Captain and Assistant Surgeon, relieved from duty in the Department of the South, October 1, 1883, and to report in person to the Commanding General, Department of the East, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Price, Curtis E.*, Captain and Assistant Surgeon, relieved from duty in the Department of the East, October 1, 1883, and to report in person to the Commanding General, Department of Dakota, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Vickery, Richard S.*, Captain and Assistant Surgeon, relieved from duty in the Department of the Platte, October 1, 1883, and to report in person to the Commanding General, Department of the Columbia, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Weisel, Daniel*, Captain and Assistant Surgeon, relieved from duty in the Department of the East, October 1, 1883, and to report in person to the Commanding General, Department of the Platte, for assignment to duty. (Par. 7, S.O. 211, A.G.O., September 14, 1883.) *Appel, Aaron H.*, First Lieutenant and Assistant Surgeon, the leave of absence granted July 20, 1883, extended one month. (Par. 10, S.O. 211, A.G.O., September 14, 1883.) *Brewster, William B.*, First Lieutenant and Assistant Surgeon, granted leave of absence for two months, from October 1, 1883, with permission to apply for an extension of four months. (Par. 1, S.O. 107, Mil. Div. of the Missouri, September 15, 1883.) *Strong, Norton*, First Lieutenant and Assistant Surgeon, now on duty in the field near Fort Thornburgh, Utah, to accompany command to Fort Douglas, Utah, and there await further orders. (Par. 2, S.O. 101, Department of the Platte, September 17, 1883.)